

BNL RADIOLOGICAL WORK PERMIT (RWP)

BROOKHAVEN
NATIONAL LABORATORY

RWP # 08-02

RWP Type: ☒ Job Specific ☐ General Start Date 08/01/08 End Date 07/31/09 Revised End Date _____

Shaded area 1 through 6 to be completed by requester / initiator

1. Initiator: Ray Karol		2. Life #: 15065		3. Phone #: 5272		4. Bldg.: 911A	
5. Location: Posted High Radiation Beam Areas: Bldg 930 LINAC Tunnel (Excluding the BLIP Beam Line). Building 942 (Booster Ring), Building 913 (AGS Ring), Building 956 (NSRL, stub tunnel) and ATR.							
6. Job Description: Routine Entry for inspections, Data Collection, Tours, and Routine Work Activities Performed by a System Specialist							
7. Radiological Concerns: (e.g. Primary radionuclides, high dose rate, airborne) Greater than 1 R/hr may exist Following Operations with High Intensity Protons at Various Limiting Apertures (e.g., E20, F5, F10, J10, and L20 in the AGS Ring, and C5, F5, and F6 in the Booster Ring).							
8. Conditions that will void RWP: This RWP is not for work in Radiation Fields > 1 R/h, in posted Contamination Areas, Work with the potential to disperse or generate radioactive contamination such as Cutting, Grinding and Drilling, Handling or exposure to tritiated water, or unapproved alterations of radiation barriers.							
9. Job Review:		10. Estimated Dose: (mrem)		11. Attachments:		12. Training Requirements:	
<input checked="" type="checkbox"/> Pre-Job Review		Highest Individual <u>20 mRem</u>		<input checked="" type="checkbox"/> Radiological Survey Form (Posted at entrance to area)		<input checked="" type="checkbox"/> Radiation Worker (RWT 002)	
<input type="checkbox"/> ALARA Review		<input type="checkbox"/> Per-Job		<input type="checkbox"/> Technical Work Document		<input type="checkbox"/> RBA Practical (RWT 002A)X	
<input type="checkbox"/> Pre-Job Brief		<input checked="" type="checkbox"/> Per Entry		<input checked="" type="checkbox"/> Other: Pre Job Review		<input type="checkbox"/> Contamination (RWT 300 / 300A)	
<input type="checkbox"/> Post-Job Review		Collective <u>200 mRem</u>		C-A OPM-ATT 9.5.11		<input type="checkbox"/> Benchtop/dispersibles (RWT 500)	
Work Control Coordinator to consult with Building Manager and/or Supervisor when assigning tasks. All work performed in Radiation Fields > 100 mRem/hr. notify Health Physics X-4660.		<input checked="" type="checkbox"/> Per Job		See SI (1)		<input checked="" type="checkbox"/> Other C-A Access – See SI (2)	
		<input type="checkbox"/> Per Entry				<input type="checkbox"/> Not Applicable	
13. Work Controls:		14. Protective Equipment:		15. Dosimetry:		16. Check Out Instructions:	
<input checked="" type="checkbox"/> FS Coverage See SI (3)		<input type="checkbox"/> Gloves		<input checked="" type="checkbox"/> TLD		<input type="checkbox"/> Bioassay	
<input type="checkbox"/> Intermittent		<input type="checkbox"/> Shoe Covers		<input checked="" type="checkbox"/> Self Reading Dosimeter		<input type="checkbox"/> Whole Body Count	
<input type="checkbox"/> Continuous		<input type="checkbox"/> Booties		<input checked="" type="checkbox"/> Alarming Dosimeter		<input type="checkbox"/> Urine Sample	
<input type="checkbox"/> Pre-Job Briefing		<input type="checkbox"/> Coveralls		<input type="checkbox"/> Finger Dosimetry		<input type="checkbox"/> Pre-Job	
<input type="checkbox"/> Limiting Conditions See SI (3)		<input type="checkbox"/> Respirator		<input type="checkbox"/> Not Applicable		<input type="checkbox"/> Post-Job	
<input type="checkbox"/> Hold Points		<input type="checkbox"/> Head Cover		(Dose Alarm Setpoint = 18 mrem)		<input type="checkbox"/> Not Applicable	
<input type="checkbox"/> Air Monitoring		<input type="checkbox"/> Not Applicable				<input checked="" type="checkbox"/> Activation Check See SI (6)	
<input type="checkbox"/> Shielding							
<input checked="" type="checkbox"/> Other See SI (5)							
17. Expected Radiological Conditions							
Radiation <input type="checkbox"/> N/A		Surface Contamination <input checked="" type="checkbox"/> N/A		Airborne Radioactivity <input checked="" type="checkbox"/> N/A			
General Area: 1 to 900 mrem/h, See posted survey		Removable: _____		Nuclide _____		Concentration _____	
On Contact: See posted survey		Removable: _____		dpm/100cm ² Alpha _____			
Gamma <input checked="" type="checkbox"/> Neutron <input type="checkbox"/>		Removable: _____		dpm/100cm ² Beta/Gamma _____			
Beta <input type="checkbox"/> Check all that apply		Total: _____		dpm/100cm ² Tritium _____			
		Total: _____		dpm/100cm ² Alpha _____			
				dpm/100cm ² Beta/Gamma _____			
18. Special Instructions (Hold Points, Limiting Conditions, Special Dose Limits, etc.)							
(1) Follow Guidance in OPM 9.5.11, C-A Procedure for Entry to Posted High Radiation Areas.							
(2) A trained and authorized C-A escort in accordance with C -A OPM 2.16 may escort visitors.							
(3) When work is to be performed in Radiation Fields > 100 mR hr ⁻¹ , notify Health Physics prior to entry. Only one notification per job is required. No single entry shall result in more than 20 mR per person. Multiple entries for one job shall be planned so that they do not result in greater than 20 mR per person or a Job-Specific RWP is required.							
(4) This RWP is not for work in Radiation Fields > 1000mR hr ⁻¹ , in posted Contamination Areas, Work with the potential to disperse or generate radioactive contamination such as Cutting, Grinding and Drilling, Handling or exposure to tritiated water, or unapproved alterations of radiation barriers.							
(5) Review appropriate radiological survey prior to commencing work.							
(6) Many locations require activation checks, See attachment 1 of this RWP for Summary of "Activation Check" Rules. Follow all postings.							
19. Approvals		Signatures		Life Number		Date	
Initiator		<i>Ray Karol</i>		15065		7/18/08	
Facility Support Representative		<i>Edward T. DeWand</i>		19773		7/18/08	
Department (As Required)				14255		7-21-08	
Close Out Signatures FS Rep.							

SUMMARY OF “ACTIVATION CHECK” RULES

Items that REQUIRE an RCT survey before removal from an area posted “activation check” are:

- ✓ Floor sweepings
- ✓ Fixed structures
- ✓ Installed components
- ✓ Shielding
- ✓ Items of unknown origin

Items that DO NOT REQUIRE an RCT survey before removal from the area posted “activation check” are:

- ✓ Items under your control at all times after removal from the posted area that are being moved to a low-background area for radiation monitoring
- ✓ Items that are labeled, under your control at all times and that are moving from the posted area to a Radiation Area, High Radiation Area, RMA or Controlled Area
- ✓ Items that you carried into the area that you know not to be activated